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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,814	01/14/2002	Gary L. Schroeder	2336	6017

31743 7590 05/25/2005

PATENT GROUP GA030-43  
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EXAMINER

TSOY, ELENA

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 05/25/2005

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/051,814  
Filing Date: January 14, 2002  
Appellant(s): SCHROEDER ET AL.

**MAILED**  
**MAY 25 2005**  
**GROUP 1700**

Robert S. Alexander  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 9, 2005.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments***

No amendment after final has been filed.

**(5) *Summary of claimed subject matter***

The summary of invention contained in the brief is correct.

**(6) *Grounds of Rejection to be reviewed on appeal***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregozen (US 5,141,803) in view of Noda et al (US 4,785,030).

Pregozen discloses a method for making a non-woven wet wipe impregnated with an aqueous composition (See column 1, lines 10-12), in which a cationic biocide (claimed cationic functional agent) is added to a preservative system to enhance the antimicrobial effect of the combination of sorbic acid and citric acid in the a preservative system (See column 2, lines 51-55). The moistened wipe may be used for cleaning e.g. kitchen counter tops, toilet bowls, sinks or delivering active ingredients such as sunscreens, insect repellants to an animate or inanimate

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surface (See column 5, lines 44-50). The moistened wipes are made by applying the aqueous composition to a flexible absorbent nonwoven substrate in an amount of about two to five times the dry weight of the web an aqueous imbuelement carrying a polymeric cationic biocide having molecular weight of 1000-1400 (See column 3, lines 61-63) or monomeric cationic biocide such as cetylpyridinium chloride (See column 7, lines 19, 27-35) at a concentration of about 0.03-0.24 % weight (active basis) of the aqueous composition (which is less than 6 milli-equivalents per liter) (See column 4, lines 10-13). The nonwoven substrate employed in the moistened wipe is a fibrous flexible absorbent nonwoven sheet material consisting essentially of cellulosic fibers or blends of cellulosic fibers such as rayon and cotton fibers or blends of such cellulosic fibers with one or more synthetic fibers such as polypropylene, polyethylene, polyester and nylon fibers (See column 4, lines 63-68; column 5, line 1). Pregozen teaches that (any) well known in the art nonwoven materials having adequate wet strength made by well known processes (See column 5, lines 7-9) such as carding, air laying, water entanglement, thermal bonding and wet laying (See column 5, lines 9-11) using suitable binders such as **styrene butadiene** polymers can be used as non-woven substrate materials for making wipes (See column 5, lines 1-12).

Pregozen fails to teach that an anionic surface charge of the web containing cellulosic fibers is not greater than 1.2 meq per kilogram (Claim 24); a non-woven binder contains non-ionic surfactant (Claim 26) or cationic surfactant (Claim 27).

Noda et al teach that cationically modified **styrene-butadiene** latexes especially with nonionic or preferably cationic surfactants added to the latex to have adequate colloidal stability, can be used as a binder for treating cellulosic fibers to provide the desired wet strength by binding to negatively charged cellulosic fibers (See column 1, lines 13-18, 51-57; column 2, lines 3-25, 54-69). In other words, Noda et al teach that cationically modified styrene-butadiene latexes

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especially with nonionic or preferably cationic surfactants are suitable for treating cellulosic fibers to provide the desired wet strength.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used cationically modified styrene-butadiene latexes added thereto nonionic or preferably cationic surfactants as a binder in Pregozen since Noda et al teach that cationically modified styrene-butadiene latexes especially with nonionic or preferably cationic surfactants are suitable for treating cellulosic fibers to provide the desired wet strength, and Pregozen teaches that (any) well known in the art nonwoven materials having adequate wet strength made by well known processes such as carding, air laying, water entanglement, thermal bonding and wet laying using suitable binders such as styrene butadiene polymers can be used as non-woven substrate materials for making wipes.

Moreover, it is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988).

The Examiner's Note: clearly an anionic surface charge of the web containing cellulosic fibers after binding to them cationic latex would be not greater than 1.2 meq per kilogram.

As to delivering a cationic functional agent, the moist wipe of Pregozen in view of Noda et al would deliver the cationic biocide because it is produced by a process substantially identical to that of claimed invention. It is held that where the claimed and prior art products are produced by identical or substantially identical processes, claimed properties or functions are presumed to be

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inherent. See MPEP 2111.02, 2112.01. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Claims 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregozen (US 5,141,803) in view of Noda et al (US 4,785,030), further in view of Rabasco et al (US 2002/0099113).

Pregozen in view of Noda et al are applied here for the same reasons as above. Pregozen in view of Noda et al fails to teach that cationic biocide is benzalkonium chloride.

Rabasco et al teach that cetylpyridinium chloride is functionally equivalent to benzalkonium chloride for their use as cationic biocide (See [0024]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used instead of cetylpyridinium chloride biocide in Pregozen in view of Noda et al since Rabasco et al further teach that cetylpyridinium chloride is functionally equivalent to benzalkonium chloride for their use as cationic biocide, and the selection of any of these known material as cationic biocide in Pregozen in view of Noda et al would be within the level of ordinary skill in the art.

As to slippery feel, Pregozen further teaches that the inclusion of the cationic biocides other than Cosmosil CQ in an amount of 0.140 wt% (See column 6, lines 8) resulted in an undesirable slippery feel being imparted to the impregnated nonwoven wipe, especially those wipes the fiber content of which contains a *significant* portion of *rayon or rayon-polyester* blends (See column 2, lines 57-64) e.g. **70/30 rayon-polyester blend** (See column 6, lines 43-46).

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Therefore, to avoid slippery feel, benzalkonium chloride should be used for impregnating wipes not of 70/30 rayon-polyester blend but wipes of other fibers, e.g. *cellulosic* fibers in an amount of much *less* than 0.140 wt%.

Claims 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregozen (US 5,141,803) in view of Noda et al (US 4,785,030), further in view of Mochizuki et al (US 4,675,347).

Pregozen in view of Noda et al are applied here for the same reasons as above. Pregozen in view of Noda et al fails to teach that the monomeric cationic biocide is benzethonium chloride.

Mochizuki et al teach that benzethonium chloride is suitable for the use as cationic biocide in aqueous compositions (See column 5, lines 55, 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used benzethonium chloride as cationic biocide in Pregozen in view of Noda et al since Mochizuki et al teach that benzethonium chloride is suitable for the use as cationic biocide in aqueous compositions.

**(7) Argument**

Applicants' arguments filed May 9, 2005 have been fully considered but they are not persuasive.

(A) Applicants argue that a cationic agent selected from polyhexamethylene biguanide hydrochloride and poly-(oxyethylenetdimethyliminio) ethylenetdimethyliminio) ethylene dichloride) in amounts which (if we take the highest weight percentage mentioned by Pregozen in his broadest teaching of his invention along with the lowest molecular weight) work out to be up to about 20 meq/liter (see col. 3, lines 61 & col. 4 line 12; MW of 1000 weight percent 0.24). In a

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comparative example (Example 2), discloses the use of benzalkonium chloride in an amount of 0.140% by weight which is roughly equivalent to 4 meq/liter but teaches that the wipe is unmarketable. Nothing in Pregozen suggests that the moist wipes are suitable for delivering an effective amount of cationic functional agent - only that the cationic functional agent is sufficient to preserve the web. Pregozen further teaches away from the preferred embodiments represented by claims 25 and following as, in Example 2, col. 7, lines 11-45, he tests, inter alia, several monomeric cationic biocides and reports that "in each case the moistened wipes obtained had an unacceptable slippery feel that rendered them unsuitable for marketing."

The Examiner respectfully disagrees with this argument. First of all, Pregozen teaches diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride not benzalkonium chloride. Secondly, in his broadest teaching, Pregozen teaches the use of 0.03 wt % of the cationic biocide. Thirdly, the concentration of the cationic biocide other than Cosmosil CQ in "slippery" wipes is 0.140 % (not 0.038%), i.e. slippery feel is rendered if the cationic biocide other than Cosmosil CQ were used in an amount of 0.140 wt% (See column 6, lines 8) with wipes the fiber content of which contains a *significant* portion of *rayon or rayon-polyester* blends (See column 2, lines 57-64) e.g. 70/30 rayon-polyester blend (See column 6, lines 43-46). Therefore, it is clear from Pregozen teaching that the slippery feel can be avoided if benzalkonium chloride is used for impregnating wipes not of *70/30 rayon-polyester blend* but wipes of other fibers, e.g. of *cellulosic* fibers in an amount of much *less* than 0.140 wt%, e.g. 0.03 wt%.

Moreover, claimed wipe is prepared from cellulosic fibers or blends of cellulosic and synthetic fibers using styrene butadiene binder with non-ionic or cationic surfactant in the



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binder (See specification, P19, 20), i.e. the moist wipe of Pregozen in view of Noda et al is prepared by a process substantially identical to that of claimed invention. Therefore, the moist wipe of Pregozen in view of Noda et al would have substantially the same feel as the wipe of claimed invention because it is prepared by a process substantially identical to that of claimed invention.

As to delivering a cationic functional agent, the moist wipe of Pregozen in view of Noda et al would deliver the cationic biocide because it is produced by a process substantially identical to that of claimed invention.

It is held that where the claimed and prior art products are produced by identical or substantially identical processes, claimed properties or functions are presumed to be inherent. See MPEP 2111.02, 2112.01. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

(B) Applicants argue that Noda et al must not be looked at to remedy the deficiencies of Pregozen because Noda et al. does not deal with a nonwoven fabric, does not deal with wet wipe, does not deal with a wet wipe having specified anti-microbial activity and does not deal with the issue of how to incorporate an effective amount of an acceptable antimicrobial such as benzalkonillm chloride into a nonwoven wet wipe. Nothing in either Noda et al. suggests that air laid or carded webs can be made suitable substrates for moist wipes for delivery of cationic functional agents merely by changing the surfactant in the latex used to consolidate the web.

The Examiner respectfully disagrees with this argument. Pregozen teaches that (any) well known in the art nonwoven materials having adequate wet strength made by well known

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processes (See column 5, lines 7-9) such as carding, air laying, water entanglement, thermal bonding and wet laying (See column 5, lines 9-11) using suitable binders such as **styrene butadiene** polymers can be used as non-woven materials for making wipes (See column 5, lines 1-12).

Noda et al are applied to show suitability of cationically modified styrene-butadiene latexes especially with nonionic or preferably cationic surfactants as a binder for treating cellulosic fibers to provide the desired wet strength by binding to negatively charged cellulosic fibers (See column 1, lines 13-18, 51-57; column 2, lines 3-25, 54-69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used cationically modified styrene-butadiene latexes added thereto nonionic or preferably cationic surfactants as a binder in Pregozen since Noda et al teach that cationically modified styrene-butadiene latexes especially with nonionic or preferably cationic surfactants are suitable for treating cellulosic fibers to provide the desired wet strength, and Pregozen teaches that (any) well known in the art nonwoven materials having adequate wet strength made by well known processes such as carding, air laying, water entanglement, thermal bonding and wet laying using suitable binders such as styrene butadiene polymers can be used as non-woven substrate materials for making wipes.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

May 24, 2005

Elena Tsoy  
Primary Examiner  
Art Unit 1762  
May 24, 2005

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